UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2194	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/791,519	GRUBER ET AL.
Office Action Summary	Examiner	Art Unit	
	VAN H. NGUYEN	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *03 January 2008*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-25* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-25* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1.   This communication is responsive to the amendment filed 01/03/2008.

Claims 1-25 are currently pending in this application.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 2 and 7, "an event selector signal" (lines 4-5) renders the claims indefinite. It is unclear if it is referring to "an event selector signal" recited at line 2.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 2, and 5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The method claim 1 differs from traditional process claims in several respects. For example, the claim does not recite any particular way of implementing the step, nor does it require any machine or apparatus to perform the step. In addition, the method claim does not recite any electrical, chemical, or mechanical acts or results, which are typical in traditional process claims. Finally, the claim does not call for any physical transformation of an article to a different state or thing. While claim 1 performs *"detecting"* and *"causing"*, it does not require any machine or apparatus to perform the step. Because the claim is completely untethered from any sort of structure or physical step, it is directed to a disembodied concept. In other words, the claim is nothing but a disembodied abstract idea until it is instantiated in some physical way so as to be limited to a practical application of the idea. For example, claim 1 does not specify whether the entity performing the steps of *"detecting"* and *"causing"* is a computer, a human, or something else. Accordingly, the claim is so broad that it is directed to the abstract idea itself, rather

than a practical implementation of the concept. Accordingly, the claim is so broad that it

is directed to the abstract idea itself, rather than a practical implementation of the

concept. In addition, the claim is "so abstract and sweeping" that it would "wholly pre-

empt" all applications (whether performed by a machine or a human) that are directed to

a method for processing command information . *See Benson*, 409 U.S. at 68-72, 175

USPQ at 675-677; see also *Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1558 (quoting

Benson).

For the same reasons discussed supra with respect to independent method claim 12, the

method claims 2 and 5 fall outside the scope of § 101.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by **Case et al.** (US

5315696).

As to claim 1:

Case teaches a method for processing command information, the method comprising:

detecting a real time event; and causing commands in a real time event command buffer

to be fetched and consumed in response to the real time event (see col.2, line 27-col.3,

line 57; col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 2:

Case teaches providing an event selector signal to a comparator; providing a plurality of

event signals to the comparator; and generating an event detection signal when an event

signal is equivalent to an event selector signal (see col.8, line 43-col.10, line 52 and Figs.

1-6 and the associated text).

As to claim 3:

Case teaches providing the commands in the real time event command buffer to be

processed by a command processor (see col.8, line 43-col.10, line 52 and Figs. 1-6 and

the associated text).

As to claim 4:

Case teaches the real time event includes a system command from a system command

buffer processed by a command processor, the method further comprising: first

consuming all of the commands within the event command buffer; and in response to

processing all of the commands of the event command buffer, processing a next system command within the system command buffer (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 5:

Case teaches detecting a second real time event; and causing commands in a second command buffer to be fetched and consumed in response to detecting the second real time event (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 6:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches providing system commands to a command processor from a system command buffer detecting a real time event; fetching commands in an event command buffer in response to the real time event; providing the commands in the event command buffer to the command processor; and consuming the real time event commands by the command processor (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 7:

Case teaches providing an event selector signal to a comparator; providing a plurality of event signals to the comparator; and generating an event detection signal when an event signal is equivalent to an event selector signal (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 8:

Case teaches fetching the system commands from the system command buffer; in

response to detecting a real time event, pausing the fetching of the system commands;

and upon the processing of all the real time event commands in the real time event

command buffer, resuming the fetching of system commands from the system command

buffer (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 9:

Case teaches detecting a second real time event; fetch commands in a second real time

event command buffer; providing the commands of the second real time event command

buffer to the system processor; and consuming the second real time event commands by

the system processor (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated

text).

As to claim 10:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches

loading a real time event into a real time event detector; providing a system command

from a system command buffer to a command processor; detecting a real time event;

fetching commands in the event command buffer; providing the commands of event

command buffer to the system processor; and consuming the real time event commands

by system processor (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated

text).

As to claim 11:

Case teaches providing an event selector signal to a comparator; providing a plurality of

event signals to the comparator; and generating an event detection signal when an event

signal is equivalent to the event selector signal (see col.8, line 43-col.10, line 52 and Figs.

1-6 and the associated text).

As to claim 12:

Case teaches loading a second real time event into the real time event detector (see col.8,

line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 13:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches

a command processor for processing system commands from a system command buffer;

a real time event engine which monitors a plurality of event signals for a real time event;

and an event command buffer, containing a plurality of real time event commands,

operably coupled to the real time event engine, wherein when the real time event occurs,

the real time event commands are fetched and consumed by the command processor (see

col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 14:

Case teaches the first real time event engine comprises: a real time event detector

comprising: an event table containing an event selector; a comparator operably coupled to

the control register for receiving the event selector; and a plurality of engines providing

the plurality of event signals to the comparator wherein the comparator compares the

plurality of event signals to the event selector and produces an event detection signal

when an event signal matches the event selector (see col.8, line 43-col.10, line 52 and

Figs. 1-6 and the associated text).

As to claim 15:

Case teaches the event table further contains a command buffer pointer and a length of

command buffer field wherein the command buffer pointer points to a command buffer

and the length of command buffer field provides the number of commands within the

command buffer (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 16:

Case teaches one of the engines is a three-dimensional video graphics engine (see col.8,

line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 17:

Case teaches the event table is stored in a local command processor memory (see col.8,

line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 18:

Case teaches a real time event controller which programs the real time event detector

with the real time event selector for the detection of the real time event (see col.8, line

43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 19:

Case teaches a second real time event engine which monitors the monitors the commands

provided to the command processor for a second real time event; and a second real time

event command buffer, containing a plurality of second real time events commands,

operably coupled to the second real time event engine, wherein when the second real time

event occurs, the second real time commands are fetched and consumed by the command

processor (see col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 20:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches

a command processor for processing system commands from a system command buffer;

a first real time event engine which monitors a plurality of event signals for a first real

time event; a first event command buffer, containing a plurality of first real time event

commands, operably coupled to the first real time event engine, wherein when the first

real time event occurs, the processing of the system commands is paused and the first real

time event commands are fetched and consumed by the command processor; a second

real time event engine which monitors the plurality of event signals for a second real time

event; and a second event command buffer, containing a plurality of second real time

event commands, operably coupled to the second real time event engine, wherein when

the second real time event occurs, the processing of commands by the command

processor is paused and the second real time event commands are fetched and consumed

by the command processor (see col.2, line 27-col.3, line 57; col.8, line 43-col.10, line 52

and Figs. 1-6 and the associated text).

As to claim 21:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches

the first real time event engine comprises a first real time event detector having a first

event selector and a first comparator which receives the first event selector; the second

real time event engine comprises a second real time event detector having a second event

selector and a second comparator which receives the second event selector; and a

plurality of engines operably coupled to the first comparator and the second comparator,

whereupon when one of the event signals matches the first event selector, a first event

detection signal is produced by the first comparator and when one of the event signals

matches the second event selector, a second event detection signal is produced by the

second comparator (see col.2, line 27-col.3, line 57; col.8, line 43-col.10, line 52 and

Figs. 1-6 and the associated text).

As to claim 22:

Case teaches one of the plurality of engines is a three dimensional graphics engine (see

col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated text).

As to claim 23:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches

a first real time event engine which monitors a plurality of event signals for a first real

time event; and a first event command buffer, containing a plurality of first real time

event commands, operably coupled to the first real time event engine, wherein when the

first real time event occurs, the processing of the system commands is paused and the

first real time event commands are fetched and consumed by the command processor (see

col.2, line 27-col.3, line 57; col.8, line 43-col.10, line 52 and Figs. 1-6 and the associated

text).

As to claim 24:

The rejection of claim 1 above is incorporated herein in full. Additionally, Case teaches

a second real time event engine which monitors the plurality of event signals for a second

real time event; a second event command buffer, containing a plurality of second real

time event commands, operably coupled to the second real time event engine, wherein

when the second real time event occurs, the processing of commands by the command

processor is paused and the second real time event commands are fetched and consumed

by the command processor (see col.2, line 27-col.3, line 57; col.8, line 43-col.10, line 52

and Figs. 1-6 and the associated text).

As to claim 25:

Case teaches the second real time event of the second real time event engine is

programmed by the first real time event engine (see col.8, line 43-col.10, line 52 and

Figs. 1-6 and the associated text).

Response to Arguments

5.   Applicant's arguments with respect to claims 1-25 have been considered but are moot in

view of the new ground(s) of rejection.

During patent examination, the pending claims must be "given their broadest reasonable

interpretation consistent with the specification." In re Hyatt 21 1 F.3d 1367, 1372, 54

USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend

the claims during prosecution, and broad interpretation by the examiner reduces the

possibility that the claim, once issued, will be interpreted more broadly than is justified.

In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). See also In

re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (1989) "During patent

examination the pending claims must be interpreted as broadly as their terms reasonably

allow.... The reason is simply that during patent prosecution when claims can be

amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."

Applicant should set forth claims in language that clearly, distinctly, unambiguously, and uniquely define the invention.

Conclusion

6.　　The prior art made of record, see PTO 892, and not relied upon is considered pertinent to applicant's disclosure. Applicant should review these references carefully before responding to this office action.

Contact Information

7.　　Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM-6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MENG-AI AN can be reached at (571) 272-3756.

The fax phone number for the organization where this application or proceeding is

assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system,   call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/
Primary Examiner, Art Unit 2194